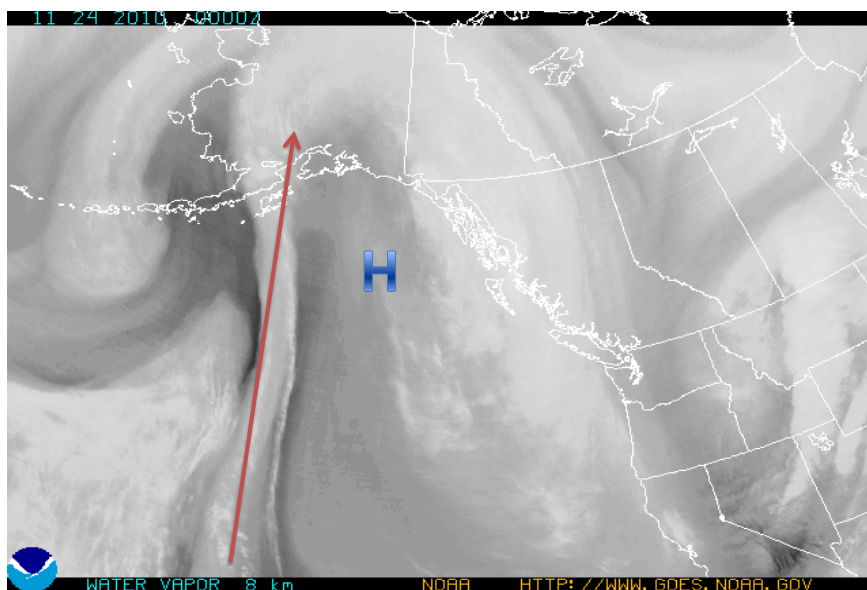


A freak winter rain storm in Interior Alaska

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For several days there were indications that an unusual weather pattern might develop that would have the potential of producing a significant rain event across interior Alaska around November 22-23, 2010. This was met with some skepticism by the forecasters at the Fairbanks, Alaska National Weather Service forecast office. Rain is truly a rare event from late October through Mid-April across interior Alaska as almost all of the precipitation falls in the form of snow.

An unusually strong ridge of high pressure in the north Pacific built across eastern Alaska. As the ridge built to the north it brought an unusually warm air mass to interior Alaska, with temperatures above freezing in the lowest few thousand feet of the atmosphere. Southwest winds around the ridge allowed the warm, moist air to move around the west end of the Alaska Range, allowing precipitation to reach the Interior, instead of being blocked by the Alaska Range (as is usually the case). A water vapor satellite image taken at 3 pm AKST on November 23rd (below) shows the copious amounts of moisture transported all the way from the sub-tropics north into interior Alaska. What followed was one of the wettest and warmest periods on record for interior Alaska during the winter months.



Rain began in the Fairbanks area around 5 am on the 22nd and lasted through shortly after 3 am on the 24th. A total of 95 hundredths of an inch of rain fell with daily rainfall records on both the 22nd and 23rd. This storm produced the second greatest winter rainfall of record at Fairbanks and the greatest ever observed during the month of November. Some areas in interior Alaska received over 2 inches of rain from this storm. Temperatures were near to a little above freezing during the event. In fact, there were 49 consecutive hours when the temperature was above freezing at the Fairbanks International Airport. This is the longest stretch of above freezing temperatures ever observed in Fairbanks during the month of November and ranks as the second longest stretch of above freezing temperatures at anytime from November through March. Weather records in Fairbanks began in 1904.

As the rain fell it froze on colder surfaces and made the roads extremely hazardous with up to 1 inch of ice accumulation on many roads. Travel was nearly impossible in spots on the 22nd into the 23rd. The icy roads lead to numerous accidents with many vehicles in ditches around the area. Although the ice did accumulate in spots on trees and power lines, the buildup of ice was not significant, and sporadic power outages that in most areas lasted for no more than 12 hours were at least in part due to trees bending onto power lines as rain-soaked snow weighed down branches. The ice storm which was dubbed “The icepocalypse of 2010” by some in the media, ~~The ice storm~~ was one of the worst in memory and shut down schools including the University of Alaska as well as state and government offices. Many businesses were also closed during the event. Although the Fairbanks International Airport managed to remain open, there were some flight cancellations.

This storm not only impacted the Fairbanks area, but also impacted most of interior Alaska all the way to the western Arctic Coast where freezing rain was observed. The freezing rain also fell as far south as Anchorage, but temperatures were warm enough in Anchorage that the worst of the freezing rain only lasted about one day. Even a month later many roads around Fairbanks are still covered under nearly an inch of ice that will probably not begin to melt away until spring.